SAMSUNG

5CD CHANGER
MICRO COMPONENT
MP3-CD/CD-R/RW PLAYBACK
MM-ZJ9DAB

Instruction Manual

GB

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUKT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
PRODUCTO LASER CLASE 1

CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER, NO USER SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

CLASS 1 LASER PRODUCT

This Compact Disc player is classified as a CLASS 1 LASER product.

Use of controls adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION-INVISIBLE LASER RADIATION WHEN OPEN AND INTER LOCKS DEFEATED, AVOID EXPOSURE TO BEAM.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

This symbol indicates that dangerous voltage constituting of a risk of electric shock is present within this unit.

This symbol indicates that there are important operating and maintenance instructions in the owners manual accompanying this unit.

Wiring the Mains Power Supply Plug(UK Only)

IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BS1362 of the same rating must be used.

Never use the plug with the fuse cover omitted. If the cover is detachable. If a replacement fuse cover is required, it must be of the same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should obtain a suitable safety approved extension lead or consult your dealer for assistance.

However, if there is no alternative to cutting off the plug, remove the fuse and then safely dispose of the plug. Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

BLUE = NEUTRAL **BROWN = LIVE**

As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:

The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E OR BY THE EARTH SYMBOL ⏚ , OR COLOURED GREEN OR GREEN AND YELLOW.

Contents

Thank you for buying this SAMSUNG micro component system.

Please take time to read these instructions. They will allow you to operate your system with ease and take full advantage of its features.

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Symbols

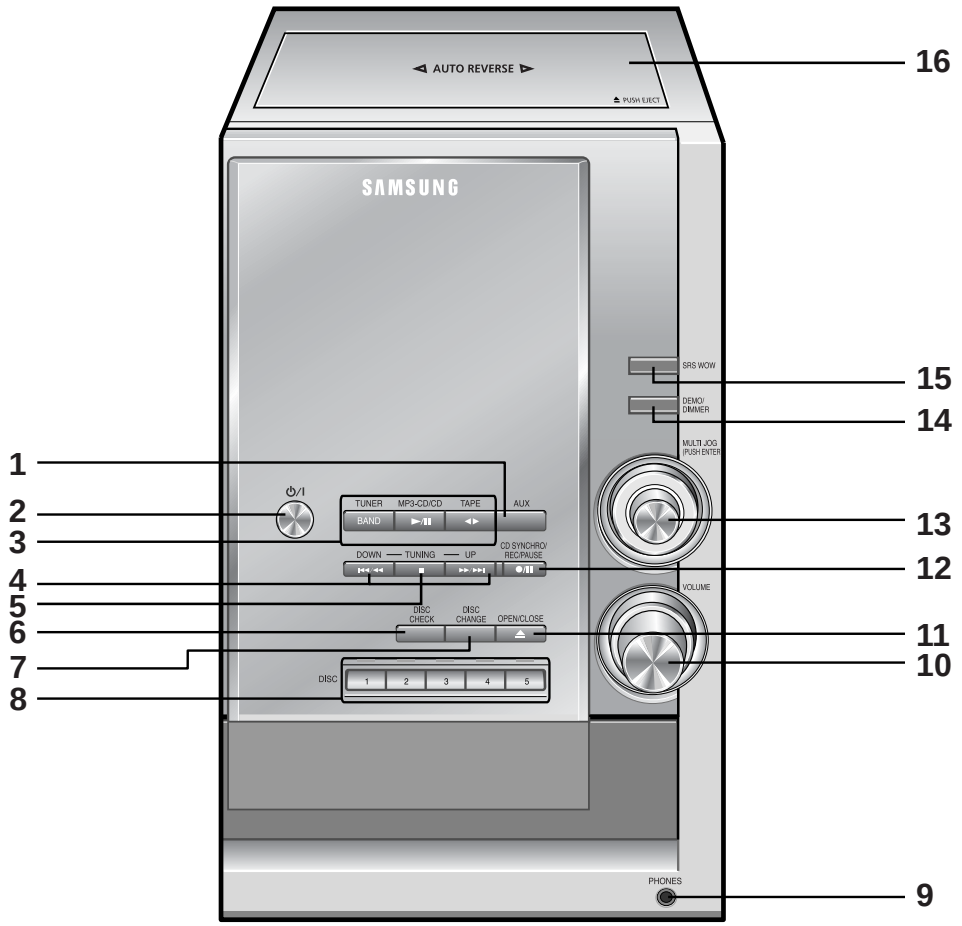
Press

Push

Important

Note

Front Panel View



1. AUX
2. ON / STANDBY
3. FUNCTIONS (TUNER / MP3-CD / CD / TAPE)
4. SEARCH FUNCTION BUTTONS
5. TUNING MODE / STOP (■) BUTTON
6. DISC CHECK BUTTON
7. DISC CHANGE BUTTON
8. DISC(1,2,3,4,5) SELECT BUTTONS
9. HEADPHONE JACK CONNECTOR
10. VOLUME CONTROL
11. CD TRAY OPEN / CLOSE
12. CD SYNCHRO / REC / PAUSE
13. MULTI JOG (PUSH ENTER)
14. DEMO / DIMMER
15. SRS WOW
16. PUSH EJECT
    (CASSETTE DOOR OPEN/CLOSE)

Remote Control

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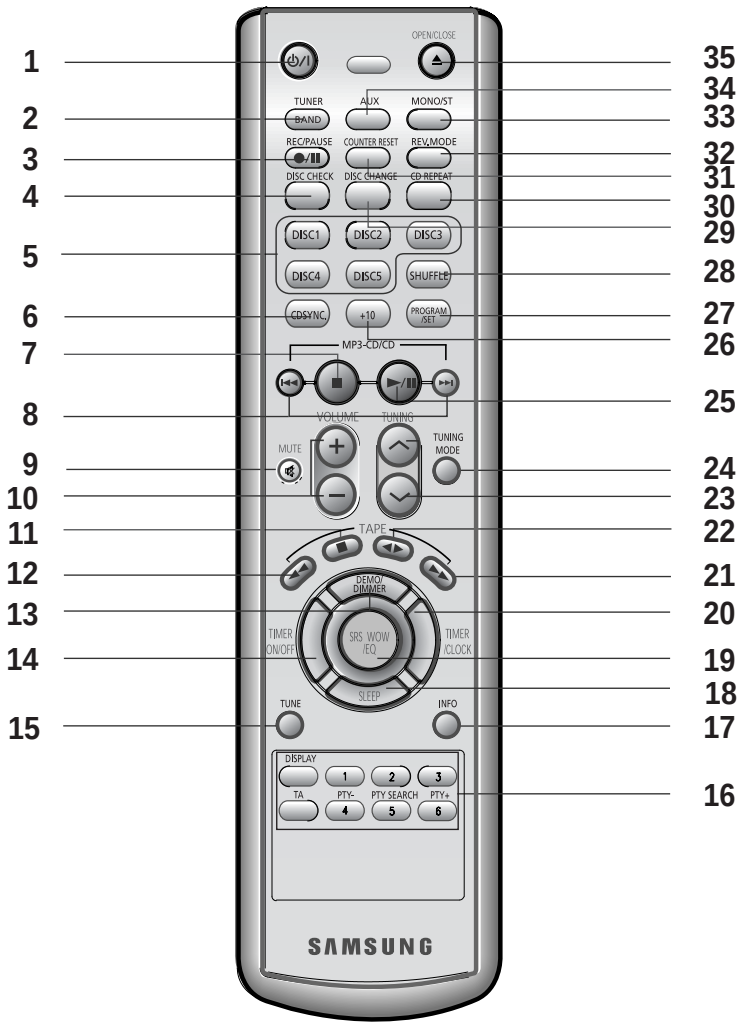

1. ON / STANDBY
2. TUNER / BAND
3. REC / PAUSE
4. DISC CHECK
5. DISC (1,2,3,4,5)
6. CD SYNCHRO
7. CD STOP
8. CD SKIP OR SEARCH
9. MUTE
10. VOLUME CONTROL
11. TAPE STOP
12. TAPE REWIND
13. DEMO / DIMMER
14. TIMER ON / OFF
15. TUNE
16. RDS SELECTION
17. INFO
18. SLEEP
19. SRS WOW / EQ
20. TIMER / CLOCK
21. TAPE FAST-FORWARD
22. TAPE PLAY
23. TUNING
24. TUNING MODE
25. CD PLAY / PAUSE
26. +10
27. PROGRAM / SET
28. SHUFFLE
29. DISC CHANGE
30. CD REPEAT
31. COUNTER RESET
32. REV.MODE
33. MONO / STEREO
34. AUX
35. OPEN / CLOSE

Rear Panel View

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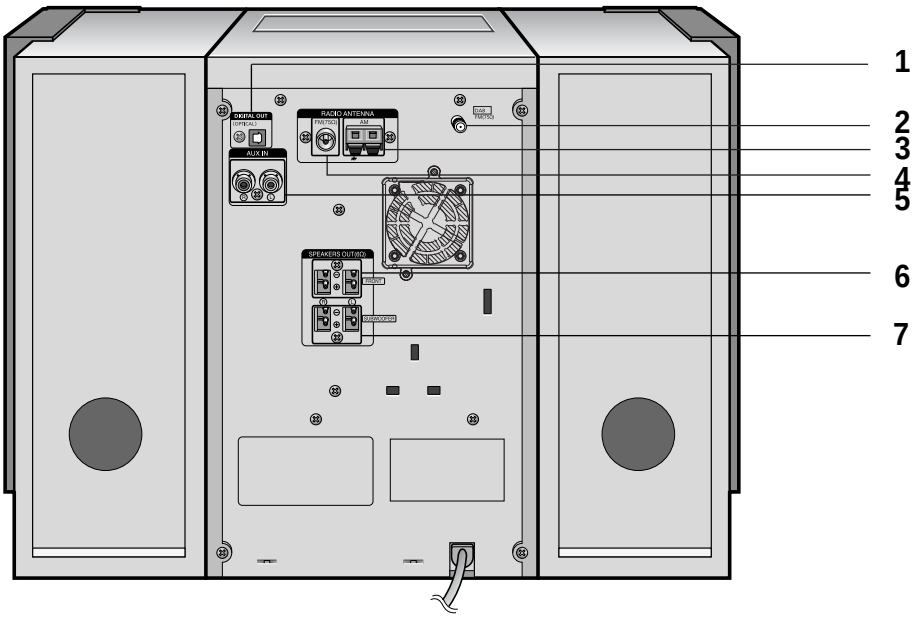


1. **CD DIGITAL OUT (OPTICAL)**
2. **DAB AERIAL CONNECTOR TERMINAL**
3. **AM AERIAL CONNECTOR TERMINALS**
4. **FM AERIAL CONNECTOR TERMINAL**
5. **AUX-INPUT**
6. **MAIN SPEAKER CONNECTOR TERMINALS**
7. **SUBWOOFER SPEAKER CONNECTOR TERMINALS**

Where to Install Your Micro Component System

To take full advantage of your new micro component system, follow these installation instructions before connecting the unit.

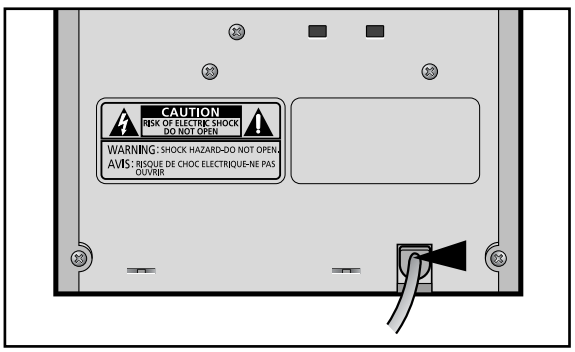
- Install the system on a flat, stable surface.
- Never place this unit on carpeting.
- Never place this unit in an outdoor area.
- Maintain an open space of approximately 6 inches (15 cm) on the sides and rear of the system, for ventilation purposes.
- Make sure that you have enough room to open the compact disc compartment easily.
- Place the loudspeakers at a reasonable distance on either side of the system to ensure good stereo sound.
- Direct the loudspeakers towards the listening area.
- For optimum performance, make sure that both speakers are placed at an equal distance above the floor.

Connecting your System to the Power Supply

The main lead must be plugged into an appropriate socket.

☛ Before plugging your system into a main socket, you must check the voltage.

1. Plug the main lead into an appropriate socket.
2. Press the (⏻/ I) button to switch your micro component system on.



Inserting Remote Control Batteries

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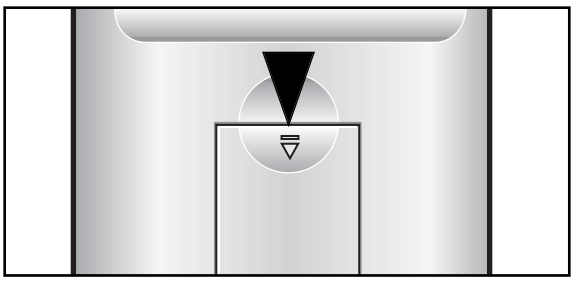
Insert or replace remote control batteries when you:

- Purchase the micro component system
- Find that the remote control is no longer operating correctly

☛ When replacing the batteries, use a new set of batteries and never mix alkaline and manganese batteries.

1. Place your thumb on the position marked ▽ on the battery compartment cover (rear of the remote control) and push the cover in the direction of the arrow.
2. Insert two AAA, LR03 or equivalent batteries, taking care to respect the polarities:
   - + on the battery against + in the battery compartment
   - – on the battery against – in the battery compartment
3. Replace the cover by sliding it back until it clicks into position.



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Connecting to an External Source

The auxiliary input can be used to take advantage of the sound quality of your micro component system when listening to other sources.

Examples: ♦ A television
♦ A video disc player
♦ A Hi-Fi stereo video cassette recorder

➢ To connect to the external source, the source must have an audio output. In addition, you need an RCA connection cable.

1 Set the system to standby mode and disconnect it and the external source from the main socket.

2 Connect the audio cable to the rear of the micro component system.

Connect the...	To the connector marked...
Red jack	R (right)
White jack	L (left)

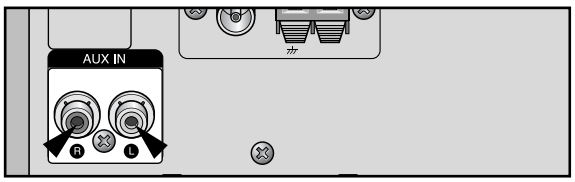
➢ For optimum sound quality, do not invert the right and left channels.

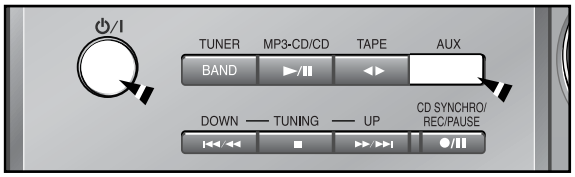
3 Plug the system back into the main socket and press the (⏻/I) button to switch it on.

4 Select the AUX source by pressing the **AUX** button.
Result: **AUX** is displayed.

5 Switch the external source on.

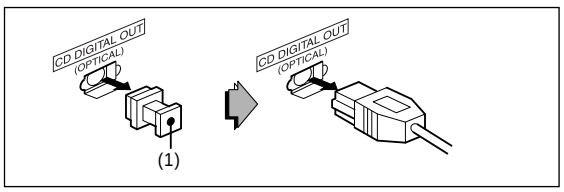
Example: You can watch a film and take advantage of stereo sound provided that the original sound track is in stereo (as if you were in a cinema).





CD Digital Out Jack

This unit can output CD digital sound signals through this jack. Use an optical cable to connect digital audio equipment. (DAT deck, MD recorder, etc.). Remove the dust cap (1) from the CD DIGITAL OUT jack. Then, connect an optical cable plug to the CD DIGITAL OUT jack.



When the CD DIGITAL OUT jack is not being used.
Attach the supplied dust cap.

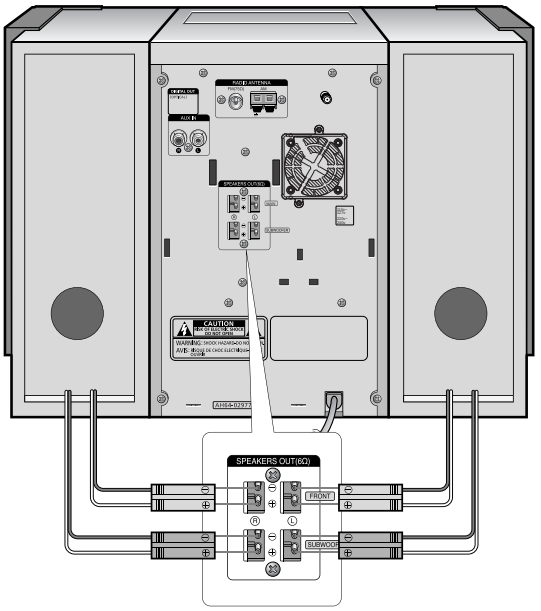
Speaker Connection

Main Speaker Connection: Connect the Speaker cords (red/black) to the Main Speaker jacks of System.

♦ Connecting MAIN Speaker: Use the MAIN speaker connection cable (Red/White) to connect the MAIN speaker.
♦ Red wire to the R terminals
♦ White wire to the L terminals

♦ Connecting Subwoofer Speaker: Use the subwoofer speaker connection cable (Black/Violet) to connect the SUBWOOFER speaker.

(Right Speaker) **(Left Speaker)**



Directions in Installing Speaker

♦ Installation in a place near heating apparatus, under direct lay of light or with high humidity may cause performance degradation of the speaker.
♦ Do not install on the wall or on a high place of pole or other unstable place to prevent any safety accident caused by falling of the speaker.
♦ Do not take the speaker apart from TV or computer monitor. The speaker near the TV or computer monitor may influence the quality of the screen display.

Connecting the AM (MW) Aerial

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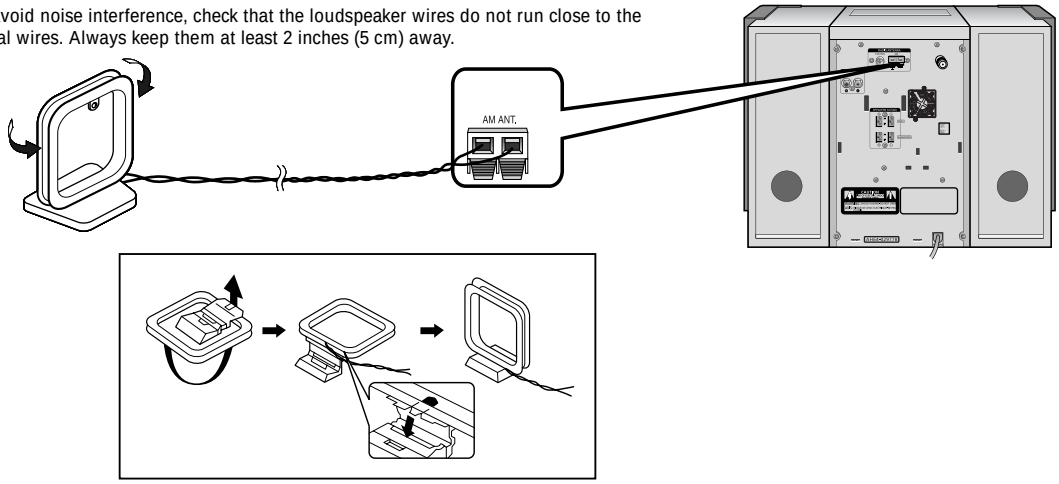
The AM aerial (for long and medium waves) can be:

- Placed on a stable surface
- Fixed to the wall (you must first remove the base)

The **AM** aerial connector terminals are located on the rear of the system and are marked **AM ANT**.

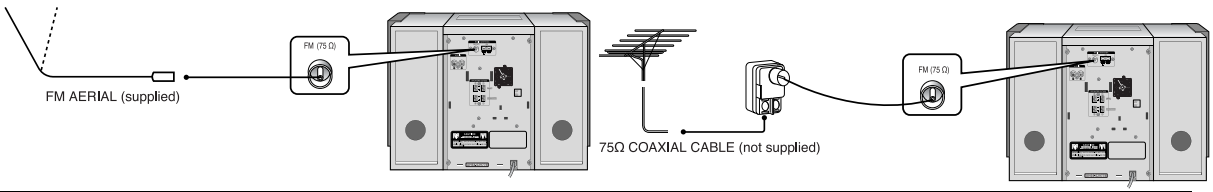
☛ To avoid noise interference, check that the loudspeaker wires do not run close to the aerial wires. Always keep them at least 2 inches (5 cm) away.



Connecting the FM Aerial

How to connect a COAXIAL TYPE aerial.

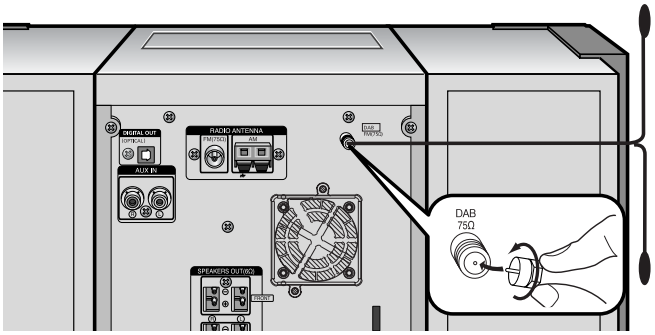
- Connect a 75Ω antenna to the **FM** antenna terminal.
- Plug the connector on the **FM** aerial supplied into the coaxial socket (75Ω) marked **FM** on the rear of the system.
- Follow the instructions given on Page 15 to tune into a radio station, and determine the best position for the aerial.
- If reception is poor, you may need to install an outdoor aerial.
  To do so, connect an outdoor **FM** aerial to the **FM** socket on the rear of the system using a 75Ω coaxial cable (not supplied).



Connecting the DAB Antenna (Included)

1 Connect the connector on the end of the DAB antenna cable into the DAB antenna input on the back of the unit.

2 Attach the end of the DAB antenna cable to a wall with good reception.



DEMO Function

You can view the various functions available on your system.

1 Press the **DEMO/DIMMER** button.
Result: The various functions available are listed in turn on the display.

➢ All these functions are described in detail in this booklet. For instructions on how to use them, refer to the appropriate sections.

2 To cancel this function, press the **DEMO/DIMMER** button again.

DIMMER Function

You can adjust the brightness of the VFD display depending on the surrounding lighting conditions.

1 Press the **DEMO/DIMMER** button.

♦ Your selection switches each time the button is pressed: **DIMMER ON(Dim) → DIMMER OFF(Bright)**.

Setting the Clock

Your system is equipped with a clock which allows you to turn your system on and off automatically.
You should set the clock:

♦ When you first purchase the micro component system
♦ After a power failure
♦ After unplugging the unit

☛ ♦ For each step, you have a few seconds to set the required options. If you exceed this time, you must start again.

1 Switch the system on by pressing (⏻/ I) .

2 Press the **TIMER/CLOCK** button twice.
Result: **CLOCK** is displayed.

3 Press the **PROGRAM/SET** button.
Result: The hour flashes.

4

To...	Press...
Increase the hours	∧
Decrease the hours	∨

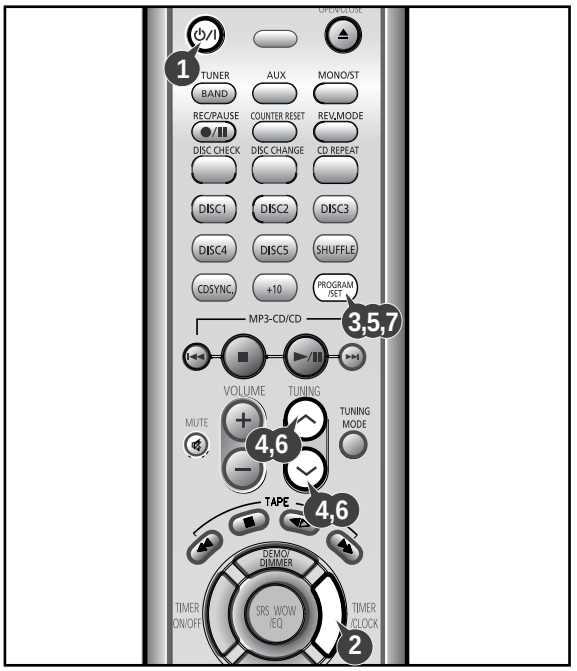
5 When the correct hour is displayed, press the **PROGRAM/SET** button.
Result: The minutes flash.

6

To...	Press...
Increase the minutes	∧
Decrease the minutes	∨

7 When the correct time is displayed, press the **PROGRAM/SET** button.
Result: ♦ "**TIMER SET**" appears in the display.
♦ The current time is now set.

➢ ♦ You can display the time, even when you are using another function, by pressing this TIMER/CLOCK button once.
♦ You can use ⏮ / ⏭ buttons on the front panel to instead of ∧ / ∨ buttons on the remote control.



Playing Back MP3-CD/CD

You can play 12 cm or 8 cm compact discs without an adapter.

This unit has been designed to playback the CDs: Audio CD, CD Text, CD-R, CD-RW and MP3-CD.

Continued use of irregular shape CDs (heart-shape, octagonal, etc.) can damage the unit.

1 Select the CD function by pressing the **MP3-CD/CD(▶/II)** button.

2 Press the **OPEN/CLOSE** (⏏) button.
Result: The compartment opens.

3 Place your disc in the compartment, with the label on the disc facing upwards.

4 Close the compartment by pressing the **OPEN/CLOSE** (⏏) button again.

5 Press the **MP3-CD/CD(▶/II)** button.
- You can also press the **DISC** (1,2,3,4,5) button directly to select and play back the disk.
- Press the **DISC CHANGE** button during playback to move to the next tray. For example, if you press the **DISC CHANGE** button during playback of No. 2 tray, the disk in No. 3 tray will be played back instead.

♦ Your CD Player will take a few moments to scan through all the tracks recorded on a particular MP3-CD

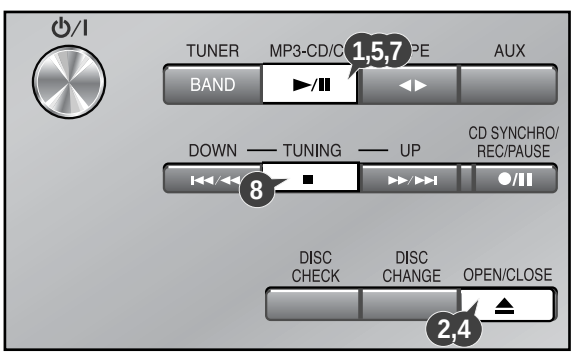
♦ The English name of the song may be indicated on the display only if directly downloaded from the PC or if the purchased MP3-CD is sorted according to titles(directory).
(Other languages besides English may not be indicated.)

♦ The English name of the track may not be indicated depending on the characteristics of the MP3-CD.

6 Adjust the volume according to needs with the following procedures.
♦ Turn the **VOLUME** control of the main unit.
or
♦ Press the **VOLUME +** or **—** button of the remote control.
The volume level can be adjust in 31 steps(VOL MIN,VOL 1- VOL 29,and VOL MAX).

7 To stop playback temporarily, press the **MP3-CD/CD (▶/II)** button.
➢ Press **MP3-CD/CD (▶/II)** again to continue playing the disc.

8 Press the **STOP** (■) button when you have finished.



Checking Disks

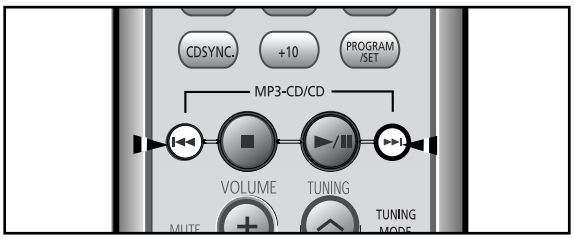
Press the DISC CHECK button.

➢ All trays except the one that is playing back or stopped will open. I.e. you can check the disks in 4 of the CD trays.

Selecting a Track

You can select the track you wish to listen to, either when the compact disc player is stopped or when a disc is playing.

To start playback at the beginning of the...	Press...
Next track	⏭ once
Current track	⏮ once
Previous track	⏮ twice
Track of your choice	⏮ or ⏭ the appropriate number of times.



Selecting the MP3-CD album and track

The album and track of the MP3-CD desired to listen may be selected on stopping or during playbacks.

1 To move the album, press the **TUNING/ALBUM** (∧ / ∨) button.

2 To move the track, press the ⏮, ⏭ button.
♦ Moves the track within the album.
♦ If the ⏮, ⏭ button is pressed more than the number of tracks within the album, it moves to the next album.

➢ This function works only with remote control.

What is MP3?

MP3 means MPEG1 Layer 3, the global standard for audio signal compression technology. It uses digital compression technology to compress original sound data by up to 12 times without sound quality degradation.

File Compatibility

- The unit will playback files created in MP3 format (Mpeg1.Layer3) with *.mp3 as their extension.
- Files created in MP2 format (Mpeg1.Layer2) with *.mp2 as their extension can also be played back.

How many MP3 files can a CD-R or CD-RW disc record?

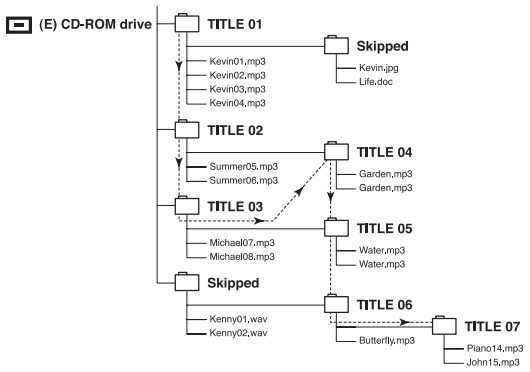
The maximum capacity of one CD-R or CD-RW disc is 740MB. Normally, one MP3 file has a capacity of 4MB, therefore approximately 180 files can be recorded on a single disc.

Regarding the playback of CD-R/RW

- In the case of an original CD-R(Recordable) recorded in audio CD format, CD-RW(Rewritable) and editing by the user, playback is processed on the respective completed status. (The player may not be played back according to the characteristics of the CD or recorded status.)

Playback sequence of albums and tracks

- In case of Window Explorer display.
- The arrows indicates playback sequence of albums and tracks.
- Tracks with jpg, wav or doc only are not audio files and therefore will be skipped.

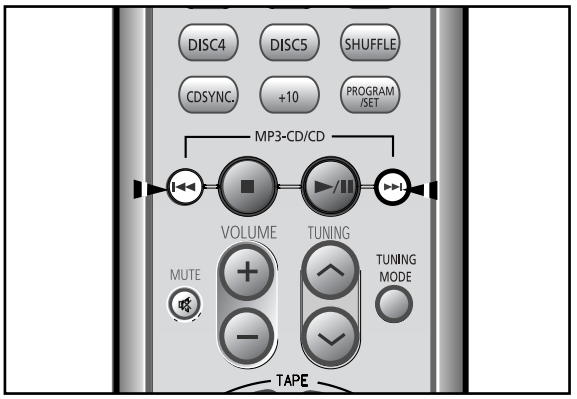


Searching for a Specific Music Passage on a CD

When listening to a compact disc, you can quickly search for a specific music passage on a track.

To search through the tracks...	Press and hold down...
Forwards	▶▶I for at least one second
Backwards	I◀◀ for at least one second

➢ It is recommended that you turn the volume down before using this function.



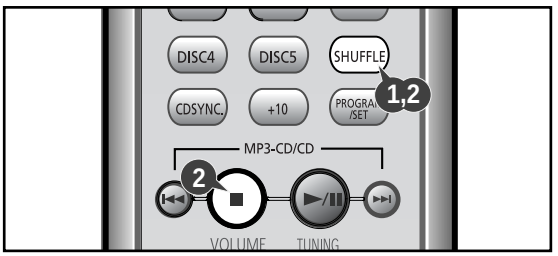
Shuffle Play Function

You can listen to the tracks on a compact disc in a different order each time, as the various tracks will be selected automatically in a random sequence.

1 Press the **SHUFFLE** button.
- If this button is pressed when the CD(SHUFFLE)or MP3-CD(RANDOM) is being played back or stopped, any track recorded in the CD may be selected to playback again.

2 When you have finished the random playback, press **STOP**(■) or press the **SHUFFLE** button again.

➢ ♦ The Repeat and CD Synchro function is not supported from the Shuffle playback mode.

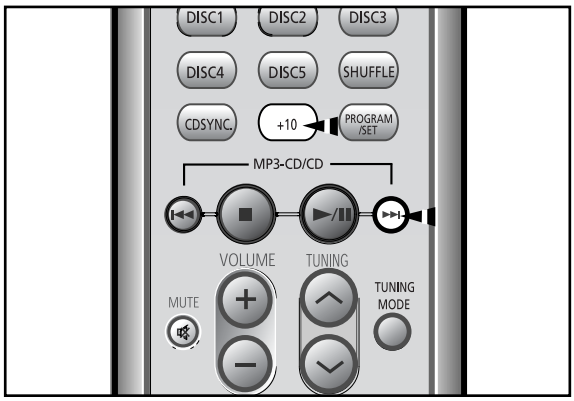


Function to skip through 10 tracks at a time

Press the +10 button briefly while playing back a CD. The track 10 tracks after the current one will then be played back.

Example: If you want to select track 43 during playback of track 15, press the +10 button three times, and then press the ⏭ button three times.

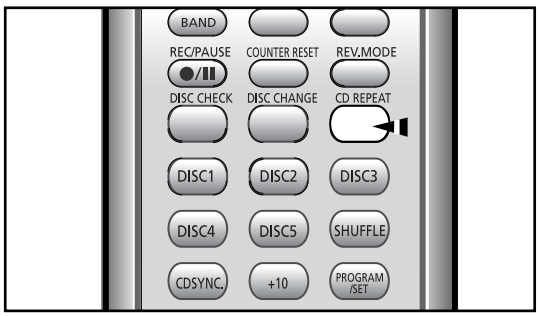
15 → 20 → 30 → 40 → 41 → 42 → 43



Repeating One or All Tracks on the Compact Discs

Press the CD REPEAT button until the playback mode you want appears.

- 1 CD: Play and stop one disk only.
- REPEAT 1: Play one track repeatedly.
- REPEAT 1CD: Play one disk repeatedly.
- REPEAT ALL CD: Play all disks repeatedly.
- ALL CD: Play all disks once and then stop.

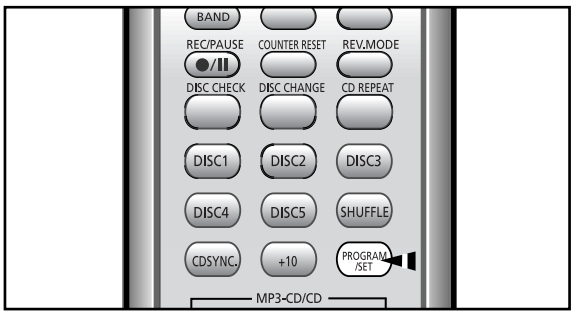


Last Memory Function

(This function is only available during playback of an MP3-CD.)

When CD playback is selected again after your CD player has been stopped or turned off, this function allows playback from the start of the track that you last listened to.

- Press the PROGRAM/SET button while your MP3-CD is being played back.
  The **LAST ON** and **LAST OFF** may be repeatedly selected.



Programming the Order of Playback

(This function is not available during playback of an MP3-CD.)

GB

You can decide:

- The order of the track desired to listen
- The track not desired to listen

➢
- A maximum of up to 24 order of tracks desired to listen may be programmed.
- Before selecting the track, the CD player should be stopped.
- This function may be used simultaneously with the CD Repeat function.
- In the case of the MP3-CD, the PROGRAM/SET button may be used as the **LAST ON**, **OFF** function.

1 If the CD function is selected, stop the player by pressing the ■ button.

2 Use the **DISC** button to open the CD tray you want and insert a **CD** in the tray.

3 Press this **PROGRAM/SET** button.
Result: The following indications are displayed:

(01 = Program no., -- -- = Track no. on the disc)

4 Select the required track by pressing:
- ⏮ to move back through the tracks
- ⏭ to move forward through the tracks

5 Press this **PROGRAM/SET** button to confirm your selection.
Result: The selection is stored and PR02 -- is displayed.

6 To select other tracks, repeat Steps **4** to **5**.

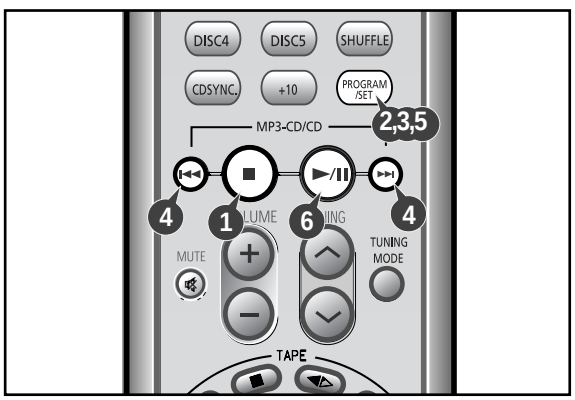
7 Press this **MP3-CD/CD** (▶/II) button to listen to the track selection in the order programmed.

8

To...	Press...
Listen to the current track again	⏮ once
Listen to the previous track	⏮ twice
Listen to the next track	⏭ once
Skip forwards or backwards one or more tracks	⏮ or ⏭ the appropriate number of times

9 To cancel the selection, press this ■ button.
- Once if the compact disc player is stopped
  Result: **PROG** is no longer displayed.

➢ If you open the compartment, the selection is cancelled.



Checking or Changing Programmed Tracks

You can check or change your selection of tracks at any time.

1 Press this ■ button once if you have started listening to the selection.

2 Press **PROGRAM/SET** button twice.
Result: The following indications are displayed:

(01 = Program no., – – = Track no. on the disc)

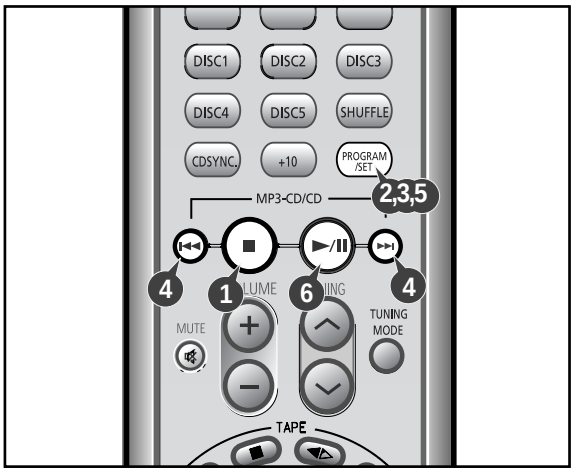
➢ If you have already programmed 24 tracks, **CH** is displayed when you press the **PROGRAM/SET** button.

3 Press this **PROGRAM/SET** button one or more times until the track to be changed is displayed.

4 Press the ⏮ or ⏭ button to select a different track.

5 Press this **PROGRAM/SET** button to confirm your change.

6 Press this **MP3-CD/CD** (▶/II) button to start listening to the selection.
Result: The first track selected is played.



Searching for and Storing the Radio Stations

You can store up to:

- 15 FM stations
- 15 AM stations

1 Switch the system on by pressing this **(⏻/ I)** button.

2 Select the required frequency band by pressing the **TUNER/BAND** button.
Result: The appropriate indication is displayed:
- **FM** Frequency Modulation
- **MW** Medium Wave

3

To search for a station...	Press TUNING MODE
Manually	One or more times until **MANUAL** is displayed.
Automatically	One or more times until **AUTO** is displayed.

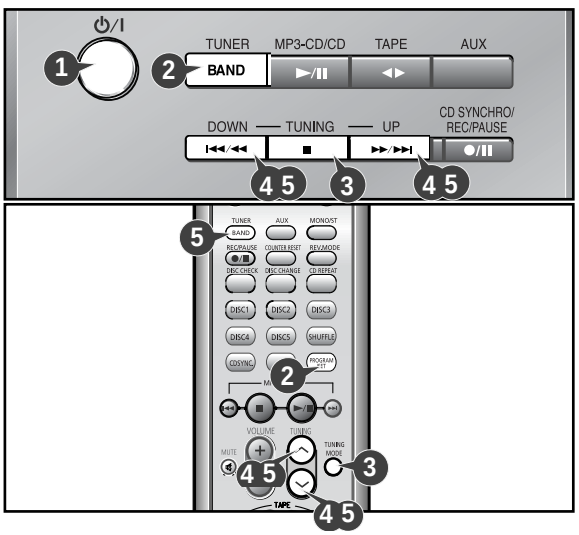
➢ PRESET function is explained in detail in the section "Selecting a Stored Station" .

4 Select the station to be stored by:
- Pressing the ⏮ or ⏭ buttons on the front panel or this ∧ or ∨ buttons on the remote control to increase or decrease the frequency respectively.
- To scroll through the frequencies faster when searching manually, hold down the ⏮ or ⏭ buttons.
- The automatic search procedure may stop on a frequency that does not correspond to a radio station. If this happens, use the manual search mode.

5 If you do not want to store the radio station found, revert to Step **4** and search for another station.
Otherwise:
- **a** Press the PROGRAM**/SET** button.
  Result: The **PROG** is displayed for a few seconds.
- **b** Press the ⏮ or ⏭ buttons on the front panel or ∧ or ∨ buttons on the remote control to assign a program number .
- **c** Press the **PROGRAM/SET** button to store the radio station.
  Result: **PROG** is no longer displayed and the station is stored.

6 To store any other radio frequencies required, repeat Steps **3** to **5**.

➢ ♦ The PROGRAM function can be used to assign a new station to an existing program number.



Selecting a Stored Station

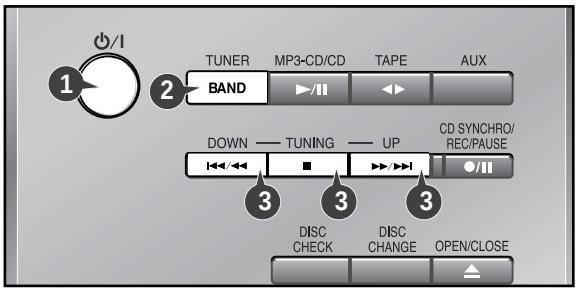
You can listen to a stored radio station as follows:

1 Switch the system on by pressing the **(⏻/ I)** button .

2 Press the **TUNER/BAND** button to select the broadcasting type you want.

3 Select the radio station as follows.

To listen to ...	Press ...
Stored station	1. the **TUNING MODE** button until "**PRESET**" is displayed. 2. the ⏮ or ⏭ button to select the required program.

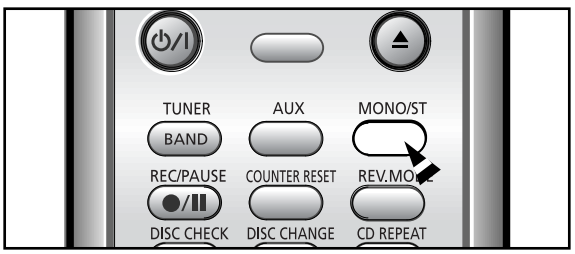


Improving Radio Reception

You can improve the quality of radio reception by:

♦ Rotating the FM or AM(MW) aerial

➢ If reception from a specific FM radio station is poor, press the **MO/ST** button**.** to switch from stereo mode to **MONO**. The quality of the sound will be improved.



Listening to DAB Stations(Future proof digital radio tuner)

GB

You can receive a DAB (Digital Audio Broadcasting) broadcast with clear CD-quality audio and text captions. However, because DAB broadcasting is still in testing phase, you can receive the broadcast only in limited areas .

Automatic Tuning

➢ If no signal can be received because the unit is being used for the first time or because you have recently moved, please set available services.

1 Press **TUNER/BAND** to select "DAB".

• Each time you press the button, the mode changes as follows:

FM → AM → DAB.

2 Press and hold **TUNE** for longer than 2 seconds.

• "AUTO TUNE" blinks on the display and all available services will be searched.

• It will about 20 to 60 seconds to search all available services. Some stations may not transmit PTY, information therefore this may not be displayed in all cases.

Manual Tuning

➢ If no signal can be received because the unit is being used for the first time or because you have recently moved, please set available services.

1 Press **TUNER/BAND** to select "DAB".

• Each time you press the button, the mode changes as follows:

FM → AM→ DAB.

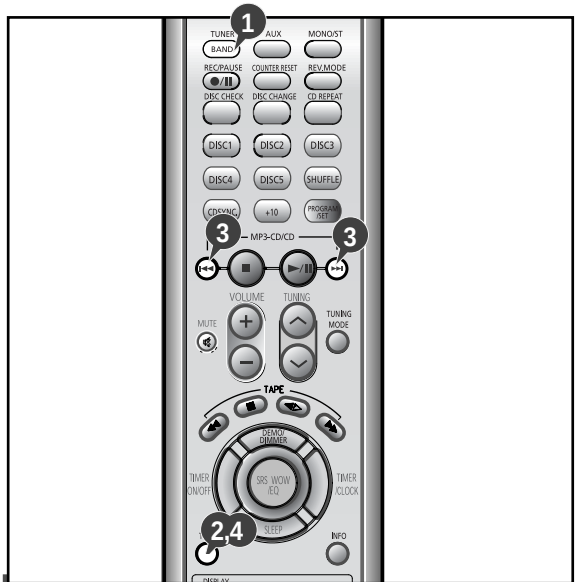
2 Press **TUNE**.

• The current frequency will be shown on the display.

3 Press ⏮, ⏭ on the remote control to move to the desired frequency.

4 Press **TUNE**.

• "**TUNING**" appears on display and the station will be searched. If no signal is received, "NO SERVICE" will appear on the display.



Remote Control Unit

1 Press **TUNER/BAND** to select "DAB".

• Each time you press the button, the mode changes as follows:

FM → AM → DAB.

2 Select the service.

• Press ∧ , ∨ to select the service and press ⏮, ⏭ to change the ensemble.

Main Unit

1 Press **TUNER/BAND** to select "DAB".

2 Select the service.

➢ • If "**NO SERVICE**" appears on the display, press and hold **TUNE** for longer than 2 seconds.

"**AUTO TUNE**" blinks on the display and all available services will be searched. If "**NO SERVICE**" continues to be displayed after the service search has finished, make sure you are not in a non-reception area and check the antenna connection.

About Ensemble and Service

• For each ensemble, there are various services such as audio and data.

If you press ⏮, ⏭ when there are many ensembles, you can easily search services.

DAB reception frequency (only band III)

174.928MHz	216.928MHz	192.352MHz	234.208MHz	209.936MHz
180.064MHz	222.064MHz	197.648MHz	239.200MHz	215.072MHz
185.360MHz	227.360MHz	202.928MHz	178.352MHz	220.352MHz
190.640MHz	232.496MHz	208.064MHz	183.648MHz	225.648MHz
195.936MHz	237.488MHz	213.360MHz	188.928MHz	230.784MHz
201.072MHz	176.640MHz	218.640MHz	194.064MHz	235.776MHz
206.352MHz	181.936MHz	223.936MHz	199.360MHz	
211.648MHz	187.072MHz	229.072MHz	204.640MHz	

Storing DAB Stations

You can store up to 6 DAB stations.

Example: Storing the service name "ALPHA1" to the service number 3

1 Press **TUNER/BAND** to select "DAB".

• Each time you press the button, the mode changes as follows:

FM → MW → LW→ DAB.

2 Press ∧ / ∨ to select the service.

• Press ⏮ / ⏭ to change the ensemble.

3 Press **PROGRAM/SET** button.

• "**PRGM**" will blink on the display.

4 Press ⏮ / ⏭ to select the service number to which the service will be stored .

• You can select a service number from1 to 6 .

5 Press **PROGRAM/SET** button .

• "**PRGM**"disappears from the display and the station will be stored .

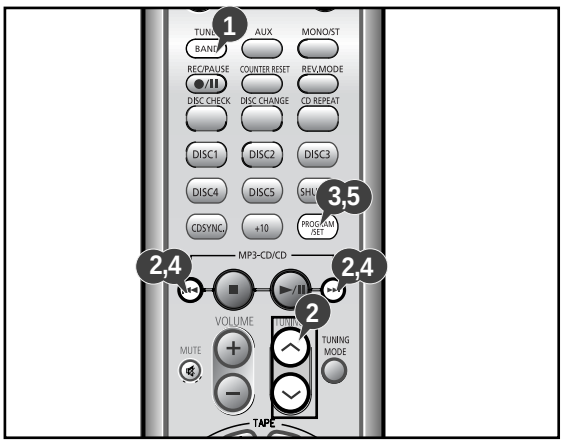
• Press the **PROGRAM/SET** button before "**PRGM**"disappear from the display .

6 Repeat steps 2 to 5 to store other stations.

Tuning in to a Stored DAB Station

• Press **1~6** on the remote control to select the stored station .

• If no station is stored when you press **1~6**, "**NO MEMORY**" will appear on the display.



DAB Related Functions

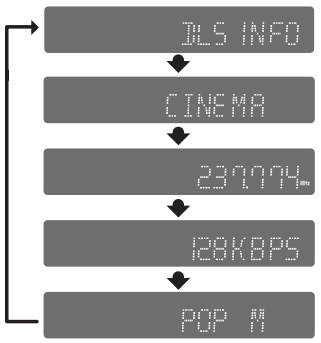
Information Display Function

You can check various information about the service being received.

Press **INFO**.

• Each time you press the button during reception, the mode changes on the display as follows:

• Depending on the service information , the display may vary or does not work.



DLS (Dynamic Label Segment): Teletext Display
This function may not work depending on the service area and broadcasting circumstances.

Ensemble Label

Frequency

Bit Rate

Program Type (Pop, Classic, Rock, etc)

• If no button is pressed for 7~8 seconds, you will be exited from the Information Display function.

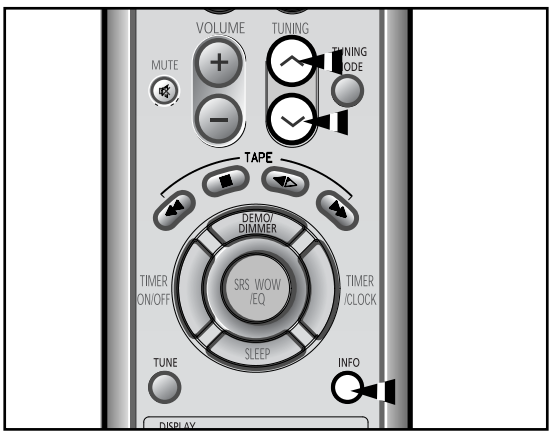
• Small letters and some special characters (Ω, /, =, ?) cannot be displayed.

To Initialize DAB

• With the DAB function selected, press **STOP** on the main unit for longer than 5 seconds.

• "**DAB RESET**" blinks on the display,then "**PUSH TUNE**" flash on the display. and the DAB function will be reset to the default setting.

• Once you have initialized DAB, you need to press the **TUNE** button to search the services again.



About RDS broadcasting

GB

This unit has the RDS (Radio Data System) function, which enables for the various information such as broadcasting station, radio text, time and 30 types of programs (News, Rock, Classic, etc.) to be received from the FM RDS station together with normal radio signal.

1 Press the **(⏻/ I)** button.

2 Receive the FM radio.
- ♦ See the radio receiving method on the **page 15**.
- ♦ FM and frequency are shown on the display
- ♦ If the received station transfers the RDS information, 'RDS' appears automatically on the display.

3 Press the **RDS DISPLAY** button to select the desired RDS mode.
- ♦ Whenever the button is pressed, RDS mode changes as follows.

PS NAME → RT → CT → Current FM frequency

☛ ♦ The RDS function is available only in FM broadcasting.

Description on RDS function

➢
1. **PTY**(Program Type) : Displays the type of programme currently being broadcast
2. **PS NAME**(Program Service Name) : Indicates the name of broadcasting station and is composed of 8 characters.
3. **RT**(Radio Text) : Decodes the text broadcast by a station (if any) and is composed of maximum 64 characters.
4. **CT**(Clock Time) : Decodes the real time clock from the FM frequency.

   ➢ Some stations may not transmit PTY, RT or CT information therefore this may not be displayed in all cases.
5. **TA**(Traffic Announcement) : When this symbol flashes it shows that the traffic announcement is in progress.

About RDS DISPLAY function

About "PS NAME" MODE

➢ Displays the name of broadcasting station.

Press the **RDS DISPLAY** button to select the PS NAME.
- ♦ "**PS NAME**" appears on the display.
- ♦ If the PS information is being received, the PS name (BBC, AFO, NDR, etc.) is shown on the display.
- ♦ If the PS information isn't received, the original FM frequency is shown.

☛ Even though no RDS DISPLAY button is pressed, the reception of PS information ensues the PS name is displayed.

About 'RT' MODE

➢ Displays the character transmitted from the broadcasting station.

Press the **RDS DISPLAY** button to select the RT MODE.
- ♦ "RT" appears on the display.
- ♦ If the RT information is being received, the received information is shown on the display.
- ♦ If the RT information isn't received, the "NO RT" is shown. On the display.

About CT(Clock Time)

➢ Sets the time of RDS clock.

To select the CT time, set the **RDS DISPLAY** button to CT MODE.

☛ ♦ The CT information will take up to 2 minutes to be decoded therefore the clock isn't displayed immediately.

♦ If there is no received CT information, "NO CT" is displayed.

PTY(Program Type) indication and PTY-SEARCH function

GB

- The PTY information is composed of an identification symbol, which helps the FM radio to recognize the program type of each FM station.
- The below 30 PTY information is shown on the display by pressing the Pty button.

Display	Program Type
NEWS	*• News including an announced opinion and report*
AFFAIRS	*• Several matters including a current incident, documentary, discussion and analysis.*
INFO	*• Information including weights and measures, returns and forecast, matters interesting the customer, medical information, etc.*
SPORT	*• Sports*
EDUCATE	*• Education*
DRAMA	*• Drama-Radio serial, etc.*
CULTURE	*• Culture-National or local culture including the religious problem, social science, language, theater,etc.*
SCIENCE	*• Natural science and technology*
VARIED	*• Others-Speech, amusing program (quiz, game), interview, comedy and satirical play, etc.*
POP M	*• Pop music*
ROCK M	*• Rock music*
M.O.R.M	*• M.O.R- Comfortable music, occasionally vocal or piece*
LIGHT M	*• Light classical music- Classical music and instrumental and chorus music*
CLASSICS	*• Heavy classical music-Orchestra music, symphony, chamber music and opera*
OTHER M	*• Other music - Jazz, R&B country music*
WEATHER	*• Weather*
FINANCE	*• Finance*
CHILDREN	*• Children's programmes*
SOCIAL	*• Social affairs*
RELIGION	*• Religion*
PHONE IN	*• Phone in*
TRAVEL	*• Travel*
LEISURE	*• Leisure*
JAZZ	*• Jazz Music*
COUNTRY	*• Country Music*
NATION M	*• National Music*
OLDIES	*• Oldies Music*
FOLK M	*• Folk Music*
DOCUMENT	*• Documentary*
TEST	*• Alarm Test*

About PTY-SEARCH

1 Receive the FM radio.
- ♦ See the radio receiving method on the **page 15**.
- ♦ The FM and frequency appear on the display.
- ♦ If the received station is transmitting the RDS information, **"RDS"** lights up.

2 Press the **PTY** button.
- ♦ The PTY MODE(NEWS, AFFAIRS, etc.) appears on the display.
- ♦ Press the TUNING ⏮ or ⏭ button to select the desired PTY MODE.

➢
- ♦ If the station is transmitting no PTY information, 'NO PTY' lights on the display.
- ♦ When the PTY MODE is selected(The PTY MODE is shown on the display), press the PTY KEY once again to convert into PTY-SEARCH MODE and auto-search the station sequentially.
- ♦ If the PTY MODE received in the course of auto-search agrees with the selected PTY MODE, the auto-search stops and the PTY-SEARCH is finished.

☛ If the PTY MODE which agrees with the PTY MODE selected in the course of auto-search, isn't received, it is returned to the first frequency at beginning the PTY SEARCH and the auto-search and PTY SEARCH are suspended.

Listening to a Cassette

➢ ♦ Aays treat your cassettes with care; refer, if necessary, to the section entitled "**Precautions When Using Audio Cassettes**" on page 26.

1 Switch the system on by pressing the **(⏻/ I)** button.

2 Press the TAPE (◄►) button.

3 Open the cassette deck by pushing on the corner of the cover marked the **PUSH EJECT** (⏏) button until you hear a click and then releasing it.
♦ Insert the pre-recorded cassette with the open edge of the tape facing downwards.

4 Close the deck by pushing on it until it clicks into place.

5

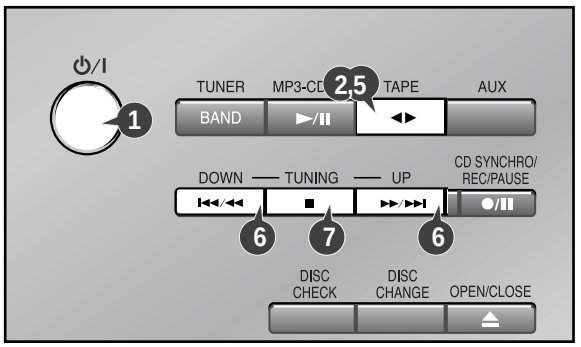
To listen to...	Press ...
Side A	TAPE (◄►) button once.
Side B	TAPE (◄►) button twice.

Result: The cassette starts playing.

6

To...	Press ...
Rewind the cassette	⏮ / ◀◀ button.
Fast-forward the cassette	▶▶ / ⏭ button.

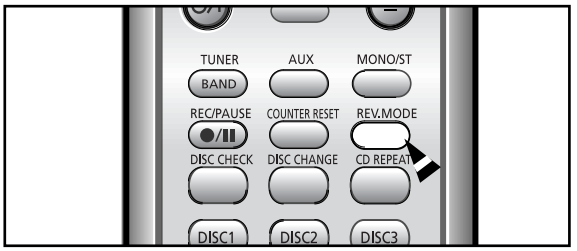
7 When you have finished playback, press the ■ button.



Selecting the Cassette Playback Mode

Your micro component system has three cassette playback modes which enable you to listen to both sides of a cassette automatically.
Press the REV.MODE button until the appropriate symbol is displayed.

When the display indicates...	The micro component system plays back...
⇉	One side of the selected cassette and then stops.
⇉	One side of the cassette. The other side of the cassette and then stops.
⇄	Both sides of the cassette indefinitely until you press stop.

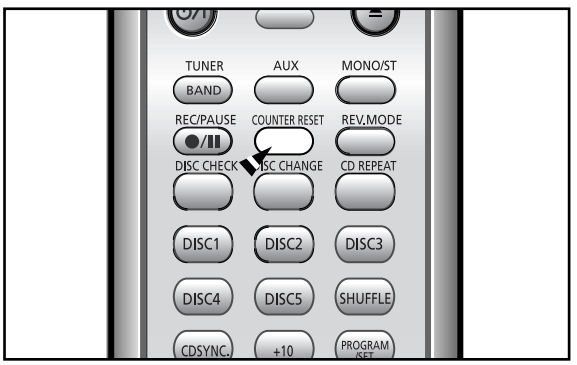


Tape Counter

When playing a cassette, a counter is displayed to enable you to take note of the counter value at the start of each track and thus start playback at the beginning of the track to which you wish to listen.

➢ The counter is only displayed when a cassette is being played.

Before starting to record a cassette for which you wish to take note of the counter values at the beginning of each track, reset the counter by pressing **Counter Reset**.



Recording a Compact Disc

You can record a compact disc on a cassette in two different ways:

- Synchronised recording
- Direct recording

Synchronised recording

This feature enables you to synchronize the start of the recording with the start of the disc or track of your choice.

1 Switch the system on by pressing the **(⏻/ I)** button .

2 Insert a blank cassette in Deck.
- Press the **PUSH/EJECT** (⏏) button to open the cassette door, insert a cassette, and then close the cassette door.
- Insert the cassette with the safety tabs.

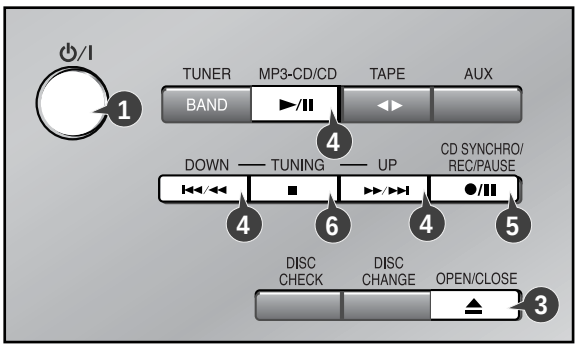
3 Use the **DISC** button to open the CD tray you want and insert a **CD** in the tray.

4 Press the **MP3-CD/CD** (**▶/II**) button.
- Use the ⏮ , ⏭ buttons to select the desired song.

5 Press and hold the **CD SYNCHRO** button.
- When stopped, press and hold the button to start the recording from the first piece of music.
- Press and hold the **CD SYNCHRO** button during the playback of CD to start the recording from the first part of the music being played.

6 To stop recording, press the ■ button.

➢ After entering CD program (PROGRAM), press CD SYNCHRO button to record the programmed track only in the order.



Direct recording

The direct recording mode enables you to start recording with any track on the compact disc.

- You do not need to adjust the volume, as it has no effect on the recording.

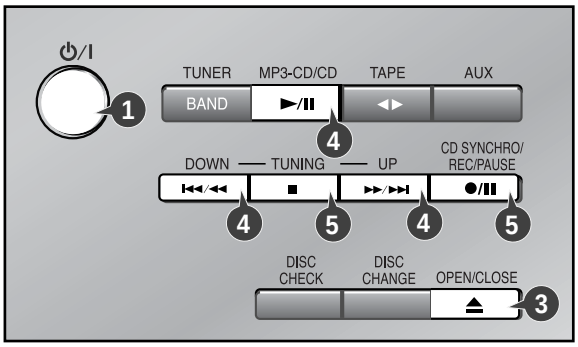
1 Switch the system on by pressing the **(⏻/ I)** button.

2 Insert a blank cassette in Deck.
- Press the **PUSH/EJECT** (⏏) button to open the cassette door, insert a cassette, and then close the cassette door.
- Insert the cassette with the safety tabs.

3 Use the **DISC** button to open the CD tray you want and insert a **CD** in the tray.
- Press the **OPEN/CLOSE** (⏏) button to open the CD door.
- Insert a CD and press the **OPEN/CLOSE** (⏏) button to close the CD door.

4 Press the **MP3-CD/CD** (**▶/II**) button.
- Use the ⏮ , ⏭ buttons to select the desired song.

5 Press the **REC/PAUSE** button.
Result:
- Recording will begin.
- To stop recording, press the ■ button.



Recording a Radio Program

You can record a radio program of your choice.

- You do not need to adjust the volume, as it has no effect on the recording.

1 Switch the system on by pressing the **(⏻/ I)** button.

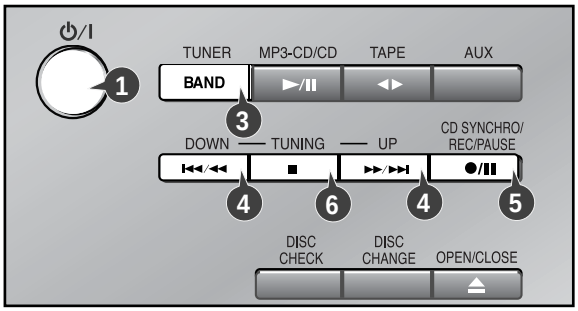
2 Insert a blank cassette in Deck.

3 Select the TUNER function by pressing the **TUNER/BAND** button.

4 Select the radio station that you wish to record by pressing the ⏮ or ⏭ button .

5 Press the **REC/PAUSE** button.
Result: **REC** is displayed in red and recording starts.

6 To stop recording, press the ■ button.



Timer Function

GB

The timer enables you to switch the system on or off at specific times.

Example: You wish to wake up to music every morning.

➢ If you no longer want the system to be switched on or off automatically, you must cancel the timer.

☛
- Before setting the timer, check that the current time is correct.
- For each step, you have a few seconds to set the required options. If you exceed this time, you must start again.

---

1 Switch the system on by pressing the **(⏻/ I)** button .

2 Press the **TIMER/CLOCK** button until **TIMER** is displayed.

3 Press the **PROGRAM/SET** button**.**
Result: **ON TIME** is displayed (instead of the equalizer symbols) for a few seconds, followed by any switch-on time already set; you can set the timer switch-on time.

4 Set the timer switch-on time.
- **a** Set the hour by pressing ∧ or ∨ button.
- **b** Press the **PROGRAM/SET** button.
  Result: The minutes flash.
- **c** Set the minutes by pressing ∧ or ∨ button.
- **d** Press the **PROGRAM/SET** button.
  Result: **OFF TIME** is displayed (instead of the equalizer symbols) for a few seconds, followed by any switch-off time already set; you can now set the timer switch-off time.

5 Set the timer switch-off time.
- **a** Set the hour by pressing the ∧ or ∨ button.
- **b** Press the **PROGRAM/SET** button.
  Result: The minutes flash.
- **c** Set the minutes by pressing the ∧ or ∨ button.
- **d** Press the **PROGRAM/SET** button.
  Result: **VOL 10** is displayed, where **10** corresponds to the volume already set.

6 Press the ∧ or ∨ button to adjust the volume level and press the **PROGRAM/SET** button.
Result: The source to be selected is displayed.

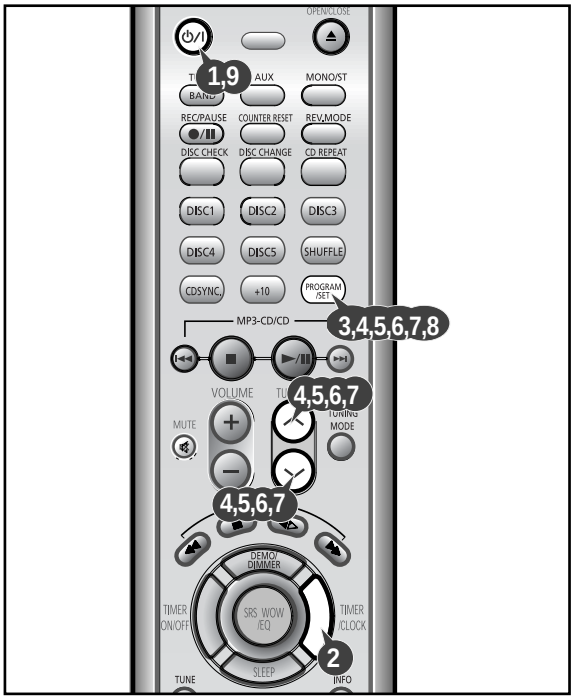
7 Press the ∧ or ∨ button to select the source to be played when the system switches on.

If you select...	You must also...
TAPE (cassette)	Insert a cassette tape.
TUNER (radio)	**a** Press **PROGRAM/SET**. **b** Select a preset station by pressing the ∧ or ∨ button.
CD (compact disc)	Load a compact disc.

8 Press the **PROGRAM/SET** button to confirm the timer.

9 Press the **(⏻/ I)** button to set the system to standby mode.
Result: 🕒 is displayed to the top left of the time, indicating that the timer has been set. The system will switch on and off automatically at the required times.

- If the timer switch on and off times are identical, the word ERROR is displayed.

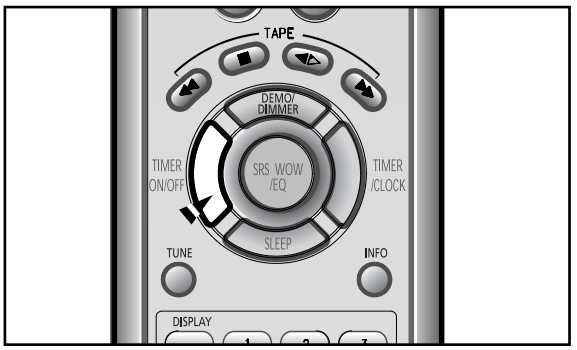


Canceling the Timer

After having set the timer, it will start automatically as shown by the TIMER indication on the display. If you no longer wish to use the timer, you must cancel it.

➢ You can stop the timer at any time (system on or in standby mode).

To...	Press TIMER ON/OFF...
Cancel the timer	Once. Result: 🕒 is no longer displayed.
Restart the timer	Twice. Result: 🕒 is displayed again.



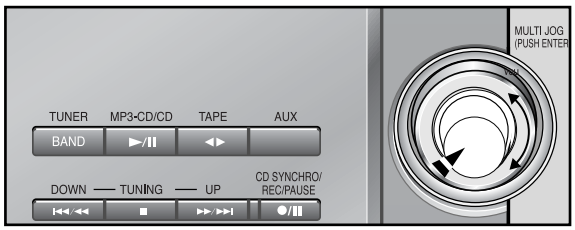
EQ/S.BASS Function

Your micro component system is equipped with a preset equalizer that allows you to choose the most appropriate balance between treble and bass frequencies, according to the type of music you are listening to.

1 Press the **MULTI JOG** button until "**EQ PASS**" appears.

2 Turn the **MULTI JOG** to select the mode you want.
Result: As you turn the MULTI JOG, POP → ROCK → CLASSICAL → JAZZ → S.BASS → P'SOUND → EQ PASS will be selected in turn.

- S.BASS Function : S.Bass function emphasizes the bass sound to produce the effect of explosion or booms.
- P.SOUND Function : You can experience the powerful and realistic sound by amplifying bass and improving the sound quality of high- and low-pitched sounds by two-fold.



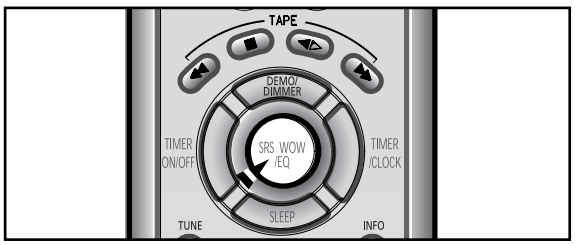
SRS WOW Function

You can enjoy realistic surround sound by using the SRS and TruBass sound field functions and the SRS WOW function that enhances sound clarity.

Press the SRS WOW button.

Result: Each time the button is pressed, the selection changes as follows: **PASS→TRU BASS → SRS → SRS WOW**.

- **TRUBASS** : Enhances the bass and low frequencies to produce deep and rich bass sounds.
- **SRS** : Provides the surround sound that fills the room.
- **SRS WOW** : Provides the surround sound effects with enhanced sound field depth and bass, through speakers and headphones.



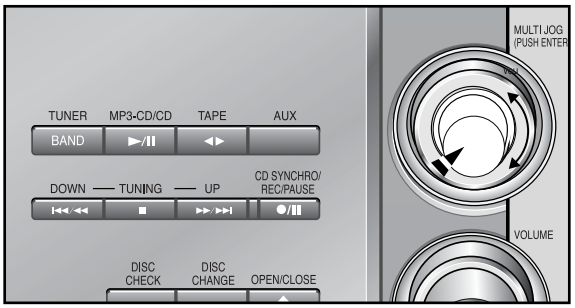
➢ ♦ SRS(●) WOW is a trademark of SRS Labs, Inc.
♦ **WOW** technology is incorporated under license from SRS Labs, Inc.

Treble Control Function

The Treble control function has the effect of emphasizing the treble sound.

1 Press the **MULTI JOG** button until "**TREB**" appears.

2 Turn the **MULTI JOG** to select the level you want, from **TREB-7 ~ TREB7**.

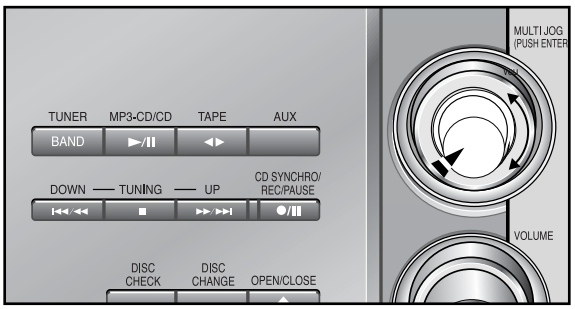


Bass Control Function

The Bass control function emphasizes the bass, providing a deep sound effect.

1 Press the **MULTI JOG** button until "**BASS**" appears.

2 Turn the **MULTI JOG** to select the level you want, from **BASS-7 ~ BASS7**.



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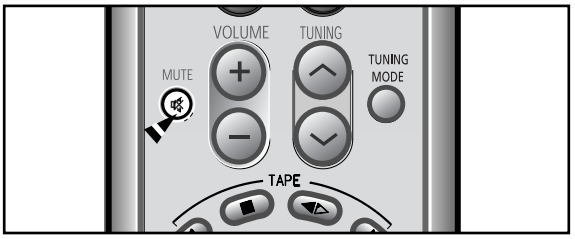
MUTE Function

You can turn the sound off temporarily on your system.
Example: You wish to answer a telephone call.

1 Press the **MUTE (** **)** button.

2 To switch the sound back on , press the **MUTE** button again or the **VOLUME** buttons.



Setting the System to Switch off Automatically

While listening to a compact disc or a cassette, you can set the system to switch off automatically
Example: You wish to go to sleep to music.

Remote Control

1 Press the **SLEEP** button.
Result: The following indications are displayed:

90 MIN

2 Press the **SLEEP** button one or more times to indicate how long the system should continue playing before it switches off:

90 MIN → **60 MIN** → **45 MIN**
OFF ← **15 MIN** ← **30 MIN**

At any time, you can:

- Check the remaining time by pressing the **SLEEP** button.
- Change the remaining time by repeating Steps **1** and **2**

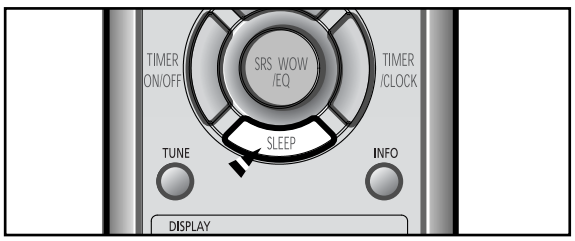
3 To cancel SLEEP function, press the **SLEEP** button one or more times until **OFF** is display.

Main unit

1 Press the **MULTI JOG** button until "**SLEEP OFF**" appears.

2 Turn the **MULTI JOG** to select the sleep off time you want.
Result:

90 MIN → **60 MIN** → **45 MIN**
OFF ← **15 MIN** ← **30 MIN**

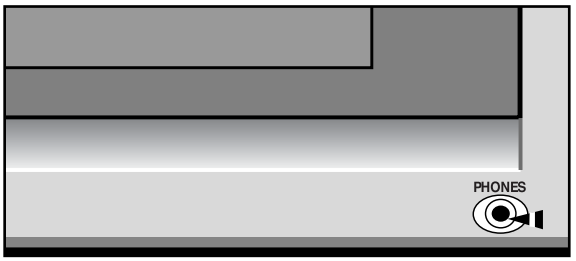


Connecting Headphones

You can connect a set of headphones to your micro component system so that you can listen to music or radio programmers without disturbing other people in the room. The earphones must have a 3.5ø jack or an appropriate adapter.

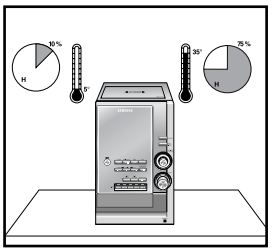
Connect the headphones to the **PHONES** jack on the front panel.
Result: The loudspeakers are no longer used to output the sound.

☛ Prolonged use of headphones at a high volume may damage your hearing.

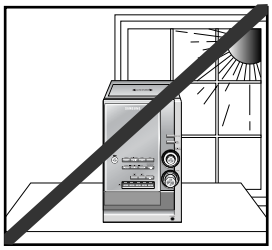


Safety Precautions

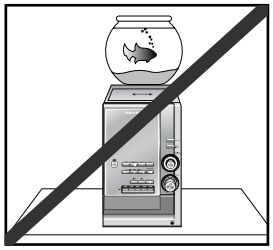
The following diagrams illustrate the precautions to be taken when using or moving your micro component system.



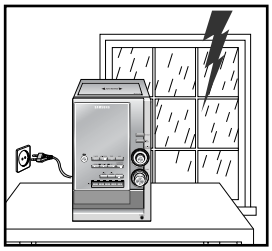
Ambient operating conditions:
Ambient temperature : 5°C-35°C
Humidity : 10-75%



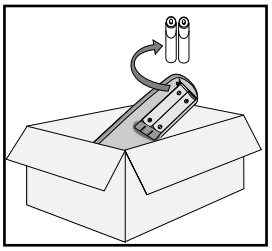
Do not expose the unit to direct sun radiation or other heat sources. This could lead to overheating and malfunction of the unit.



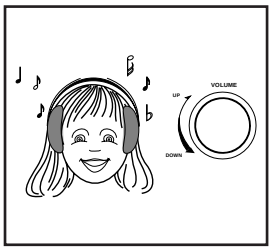
Do not place potted plants or vases on top of the unit. Moisture entering the unit could lead to dangerous electric shock and can cause equipment damage. In such events immediately disconnect the main plug from the socket.



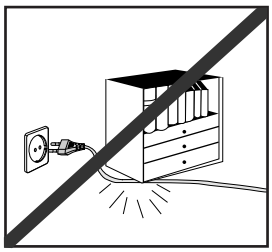
During thunderstorms, disconnect the main plug from the socket. Main voltage peaks due to lightning could damage the unit.



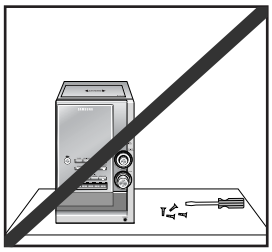
Remove the batteries from the remote control, if not used for any extended period.
Leaking batteries can cause serious damage to the remote control.



When using headphones, take care not to listen at excessive volumes. Extended use of headphones at high volumes will lead to hearing damage.



Do not place heavy items on the main lead. Main cable damage can lead to damage of the equipment (fire hazard) and can cause electric shock.



Do not remove any equipment panels. The inside of the unit contains live components, which cause electric shock.

Cleaning Your Micro Component System

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To obtain the best possible results from your micro component system, you must clean the following elements regularly:

- The outer casing
- The compact disc player
- The cassette players (heads, rollers and drive capstans)

☛ Aays unplug the system from the wall outlet:

- Before cleaning it
- If you are not going to be using it for a long time

Outer Casing

Clean the outer casing regularly using a soft cloth and a light detergent. Do not use abrasive powders, liquids or aerosol cleaners. Never let any liquids get into the system.

Compact Disc Player

1 Before playing a compact disc, clean it with a special CD cleaning agent. Do not use the same cleaning agents as for vinyl LP records. Carefully wipe the disc from the centre outward.

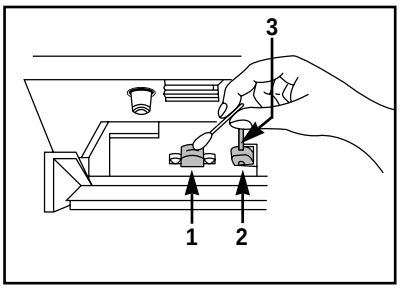
2 Regularly clean the player with a special cleaning disc (available from your local dealer).

Tape Decks

1 Press the **PUSH EJECT**(⏏) button to open the cassette deck.

2 Use a cotton bud and a special cassette cleaning agent to clean the:

- Head (1)
- Rollers (2)
- Drive capstans (3)

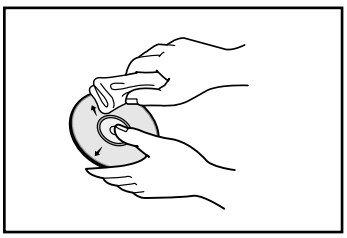


☛
- If you will not be using the remote control for a long time, remove the batteries to prevent corrosion.
- Although your system is very hard-wearing, it should not be used in an excessively dusty environment or subjected to shocks or extreme heat (close to heating appliances or in direct sunlight, etc.).
- If the unit emits an unpleasant odor when in use, unplug it from the main supply and contact the after-sales service.

GB

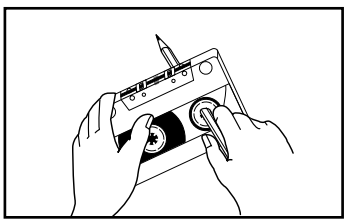
Precautions When Using Compact Discs

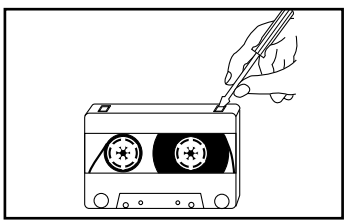
- Handle your compact discs with care. Aays hold them by the edges to avoid leaving fingerprints on the shiny surface.
- When you have finished playing a compact disc, aays put it back in its case.
- Do not fix paper or adhesive tape to the discs and do not write on the label.
- Clean them with a special-purpose cloth.
- Store your compact discs in a clean place, out of direct sunlight, where they will not be exposed to high temperatures.
- Aays use compact discs marked

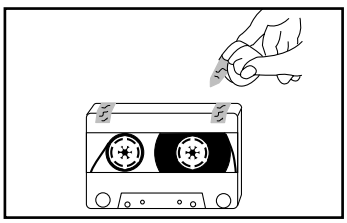


Precautions When Using Audio Cassettes

- Check that the tape in the cassette is sufficiently taut.
- To prevent erasing a cassette that you wish to keep, remove the safety tab on the upper edge of the cassette. To record a cassette, where the tab has been broken, simply cover the opening with adhesive tape.
- When you have finished playing a cassette, aays put it back in its case.
- Store your cassettes in a clean place, out of direct sunlight, where they will not be exposed to high temperatures.
- Avoid using 120-minute cassettes as they place unnecessary strain on the tape mechanism.







Before Contacting the After-Sales Service

It aays takes a little time to become familiar with a new appliance. If you have any of the problems listed below, try the solutions given. They may save you the time and inconvenience of an unnecessary service call.

	Problem	Checks/Explanation
GENERAL	The system does not work	• *The main lead is not correctly plugged into a wall socket or the wall socket is not switched on.* • *The remote control batteries need replacing or the polarity has not been respected.* • *The ⏻/I button has not been pressed.*
	There is no sound	• *The volume has been completely turned down.* • *The correct function (TUNER, CD, TAPE, AUX) has not been selected.* • *You have connected a set of earphones.* • *The loudspeaker wires have been disconnected.* • *The **MUTE** button has been pressed.*
	The Timer does not work	• *The timer has been stopped by pressing **TIMER ON/OFF**.*
	In case it does not work, even the action is taken as above.	• *Press the **TUNING MODE** button for 5 seconds in power 'OFF'(standby), then it is returned the original position (RESET)*
CD	The compact disc player does not start playing	• *The CD function has not been selected.* • *The disc has been inserted face down or is either dirty or scratched.* • *The laser sensor is dirty or dusty.* • *The system has not been installed on a flat, horizontal surface.* • *Condensation has formed in the player; leave the system in a warm, airy room for at least one hour.* • *If you turn the unit on again after pulling out the power plug without turning it off, or if the electricity goes off, playing will not restart automatically. Press the Play (⏯) button again.*
CASSETTES	The tape does not start playing	• *The TAPE function has not been selected.* • *The cassette has not been inserted correctly.* • *The cassette player has not been closed.* • *The tape is either slack or broken.*
	The volume falls off The cassette is not erased correctly There is excessive wow and flutter	• *The audio heads are dirty.* • *The rollers or drive capstans are dirty.* • *The tape is worn.*
RADIO	Reception is poor or no radio stations are received at all	• *The TUNER function has not been selected.* • *The radio frequency has not been correctly selected.* • *The aerial has been disconnected or is not facing the right way. Turn it until you find the best orientation.* • *You are in a building that blocks radio waves; you must use an outside aerial.*

If the above guidelines do not allow you to solve the problem, take a note of:

- The model and serial numbers, normally printed on the rear of the system
- Your warranty details
- A clear description of the problem

Then contact your local dealer or SAMSUNG after-sales service.

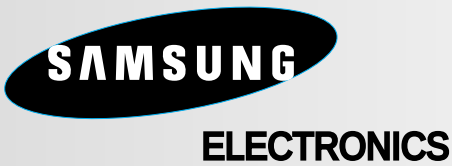
Technical Specifications

GB

SAMSUNG strives to improve its products at all times. Both the design specifications and these user instructions are thus subject to change without notice.

RADIO	
AM (MW)	
Signal/noise ratio	40 dB
Usable sensitivity	56 dB
Total harmonic distortion	2 %
FM	
Signal/noise ratio	60 dB
Usable sensitivity	3 dB
Total harmonic distortion	1.0 %
COMPACT DISC PLAYER	
Frequency range	20 Hz - 20 KHz (± 1 dB)
Signal/noise ratio	90 dB (at 1 KHz) with filter
Distortion	0.05 % (at 1 KHz)
Channel separation	80 dB
Disc sizes	Diameter: 120 or 80 mm. Thickness: 1.2 mm
TAPE DECK	
Frequency range	125 Hz ~ 10 KHz
Signal/noise ratio	40 dB
Channel separation	35 dB
Erasing effect	60 dB
AMPLIFIER	
Output power(6 Ω)	Main unit: 2 x 20 Watts RMS (THD: 10 %) Subwoofer: 2 x 40 Watts RMS (THD: 10 %)
Channel separation	50 dB
Signal/noise ratio	80 dB
GENERAL	
Dimensions	172(W) x 194 (H) x 310(D) mm

THIS APPLIANCE IS MANUFACTURED BY:



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